What is claimed is:

1. A method for calculating high-resolution wafer parameter profiles comprising the steps of:

a) defining appropriate product/device input dataset;

b) collecting a die level dataset for one of the products/devices defined in step (a) by generating a table of data for the lots and wafers of said one product/device with the virtual die coordinate for each die and its corresponding value;

c) calculating a single composite value for each die coordinate;

d) defining where on the virtual die it is desired to assign the composite value;

e) calculating physical coordinates for each die value using the corresponding virtual coordinate and physical translation key;

f) repeating steps (b), (c), (d) and (e) for each product defined in step (a);

g) merging the data from all the files into one file;

h) defining a grid that is at the resolution of needed for the analysis;

I) creating a table with all the possible grid coordinates that would fit on a production wafer;

j) defining a smoothing algorithm;

k) calculating the smoothed value for each point on the grid from the combined data; and

l) plotting the wafer profile for various visualizations.

2. A method as defined in claim 1, further including the step of normalizing the composite die values so that they can be merged with values from the other products.

3. A method as defined in claim 2, wherein a Poisson Defect Density normalizing algorithm is used to perform the step of normalizing the composite die values so that they can be merged with values from the other products.

4. A method as defined in claim 2, wherein a max-min scaling normalizing algorithm is used to perform the step of normalizing the composite die values so that they can be merged with values from the other products.

5. A method as defined in claim 1, wherein said appropriate product/device input dataset of step (a) are defined by a variety of devices with die level data and different die sizes.

6. A method as defined in claim 1, wherein said appropriate product/device input dataset of step (a) are defined by products/devices which represent the same process flow to be modeled.

7. A method as defined in claim 1, wherein said appropriate product/device input dataset of step (a) are defined by sufficient number of lots from each device to calculate a reasonable average result value for each die.

8. A method as defined in claim 1, wherein said appropriate product/device input dataset of step (a) are defined by die size for each device.

9. A method as defined in claim 1, wherein said appropriate product/device input dataset of step (a) are defined by at least one reference physical correlation point between a specific virtual coordinate and an actual physical location on the wafer.

10. A method as defined in claim 1, wherein said calculated single composite value for each die coordinate from step (c) is an average of the data from all the individual lots and wafers corresponding die site.

11. A method as defined in claim 1, wherein said calculated single composite value for each die coordinate from step (c) is a max of the data from all the individual lots and wafers corresponding die site.

12. A method as defined in claim 1, wherein said calculated single composite value for each die coordinate from step (c) is a sum of the data from all the individual lots and wafers corresponding die site.

13. A method as defined in claim 1, wherein said calculated single composite value for each die coordinate from step (c) is a percentage of the data from all the individual lots and wafers corresponding die site.

14. A method as defined in claim 1, wherein said composite value from step (d) is assigned to a corner of the die nearest an edge of the wafer.

15. A method as defined in claim 1, wherein said composite value from step (d) is assigned to a corner of the die nearest a center of the wafer.

16. A method as defined in claim 1, wherein said composite value from step (d) is assigned from a center of the die.

17. A method as defined in claim 1, wherein a Cartesian coordinate system is used to calculate physical coordinates from step (e).

18. A method as defined in claim 1, wherein a polar coordinate system is used to calculate physical coordinates from step (e).

19. A method as defined in claim 1, wherein the wafer profile is scaled, in accordance with step (l), in equal increments of the range of values.

20. A method as defined in claim 1, wherein the wafer profile is scaled, in accordance with step (l), in equal percentiles of the data.

21. A method as defined in claim 1, wherein the wafer profile is plotted, in accordance with step (l), to show a three-dimensional contour map of the data.